

State of Ohio Environmental Protection Agency

Southwest District Office

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George V. Voinovich Governor

May 28, 1998

RE:

DOE FEMP

COMMENTS: CERTIFICATION REPORT

FOR A1P2 SECTOR 1, 2A, & CD

Mr. Johnny Reising

U.S. Department of Energy, Fernald Area Office

P.O. Box 538705

Cincinnati, OH 45253-8705

Dear Mr. Reising:

Ohio EPA has reviewed DOE's May 4, 1998 submittal, "Transmittal fo the Area 1 Phase II - Sector 1, 2a, and Conveyance Ditch Certification Report". Attached are our comments regarding the document.

If you have any questions, please contact Donna Bohannon or me.

Sincerely,

Thomas A. Schneider

Fernald Project Manager

Office of Federal Facilities Oversight

cc:

Jim Saric, U.S. EPA

Terry Hagen, FDF

Ruth Vandergrift, ODH

Mark Shupe, HSI GeoTrans

Francie Barker, Tetra Tech EM Inc.

Manager, TPSS/DERR,CO

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Simply combining the data is not an acceptable statistical method. The appropriate method is to evaluate the data separately and to determine if the two populations are different. Additionally, Ohio EPA believes it was obvious that the CU had received uncontrolled runoff from the East Impacted Stockpile. The most appropriate course of action would be to resample the entire CU, at a minimum the data sets must be evaluated separately. Ohio EPA expects that in the future DOE will take action to ensure run-on is controlled for areas in which certification sampling is completed.

8. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 3 Pg #: 3-1 Line #:33 Code: C

Comment: There is no CU A1PII-S2-01. The correct CU is probably A1PII-S1-01.

9. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.2 Pg #:3-1 Line #: 33-37 Code: C

Comment: The combining of data from separate populations or non-homogenous areas is not acceptable. Ohio EPA expects that data from the pile will be evaluated separately from that of the remainder of the CU.

10. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 3.2 Pg #:3-2 Line #:11-12 Code: C

Comment: Ohio EPA is unclear on what this modification is referring too. A figure showing the change in CU boundary is needed along with additional text.

11. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 4 Pg #: 4-6 Line #: 15 Code: C

Comment: The practice of averaging duplicate concentrations is not appropriate for soil certification. The maximum value between the two duplicates should be used.

12. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 5 Pg #: 5-1 Line #: 9 Code: E

Comment: Revise text from "samples were collected help refine" to "samples were collected to help refine."

13. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: 5.1 Pg #:5-1 Line #: 14-21 Code: C

Comment: These data represent a hot spot which should be removed and not reused. Ohio EPA recommends removal of the soil in the bounded area with subsequent placement inside the trap range for treatment with other lead contaminated soil. Any other use of the soils will require TCLP analysis for RCRA characterization.

14. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 5 Pg #: 5-1 Line #: 21 Code: C

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Comment: The statement that the extent of high lead concentration levels is bounded by the surrounding samples is unjustified. Even though there are samples within approximately 25 feet of Sample 10 to the north and east, the nearest samples in other directions are considerably further away (more than 100 feet). Specific hotspot criteria (analogous to that which exists for the primary radiological COCs) should be developed and implemented for nonradiological COCs.

15. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 5

Pg #: 5-1

Line #: 24

Code: E

Comment: Revise "that will released" to "that will be released."

16. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 5

Pg #: 5-1

Line #: 28

Code: E

Comment: Revise "where is culvert" to "where a culvert."

17. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 5

Pg #: 5-2

Line #: 5

Code: C

Comment: The planned culverts are not shown on Figure 5-3.

18. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 5

Pg #: 5-2

Line #: 6

Code: C

Comment: It is not clear what "samples" are meant by the text- the original samples or the additional samples shown on the figure.

Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: 5.2 Pg #:5-2

Line #: 8-10 Code: C

Comment: Ohio EPA disagrees that the samples previously collected are sufficient to characterize the area of excavation. Data collected from the area of planned excavation are required to appropriately characterize the soils. The revised report should include data from the area of excavation.

20. Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: 5.3 Pg #:5-2

Line #:15-16 Code: C

Comment: Ohio EPA disagrees with DOE's assertion that hot spots are only applicable to primary radiological ASCOCs. Hot spot criteria regarding certification sampling should be applicable to all ASCOCs.

21. Commenting Organization: Ohio EPA

Commentor: OFFO

Section #: 5.3 Pg #:5-2

Line #:

Code: C

Comment: Upon reviewing the data for A1PII-S3-CD-01, Ohio EPA recommends the soil from the area be transferred to the OSDF for disposal. Considering the UCL is 80 ppm for total uranium and that the soil will be excavated, Ohio EPA believes this is an appropriate area to utilize the ALARA goal of 50 ppm to make the material disposition decision.

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22. Commenting Organization: OEPA Commentor: HSI GeoTrans. Inc.

Section #: 6

Pg #: 6-1

Line #: 13

Code: E

Comment: Revise "area must have been clean in accordance" to "area must have been cleaned in accordance."

23. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: 6

Pg #: 6-1

Line #: 14

Code: E

Comment: Revise "any use in a uncertified areas" to "any use in uncertified areas."

24. Commenting Organization: Ohio EPA Commentor: OFFO

Section #: Table for A1PII-S1-02

Pg #: Line #:

Code: E

Comment: The table references a lead FRL of 1.5 rather than 400. Please revise.

25. Commenting Organization: OEPA Commentor: HSI GeoTrans, Inc.

Section #: Appendix A

Pg #: NA Line #: NA Code: C Comment: It is apparent from the certification tables that the assumption of normality (or lognormality for some CUs) has been rejected for numerous data sets. The application of the Shapiro-Wilk test to approximately five percent of the data sets indicates that the rejection of normality was inappropriate in many cases (e.g., Ra226 for A1PII-S1-01, arsenic for A1PII-S1-02, and Ra226 for A1PII-S1-04, and others) thus resulting in the failure to select the most appropriate statistical test. The Shapiro-Wilk procedure used is documented in the USEPA (1993); the calculations were alternatively performed using the commercially available software Statmost (DataMost Corporation, 1995). In order for review of the normality-checking procedures used in generating the certification tables in Appendix A, the results of the methods applied should be summarized in the document. For example, if the Shapiro-Wilk test was used, the W statistics and associated critical values should be provided. References:

USEPA, 1992. Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities. Addendum to Interim Final Guidance.

DataMost Corporation, 1995. StatMost Version 3.0.

